DOCUMENT RESUME

ED 452 004 RC 022 941

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TITLE Prevention of Alcoholism, Drug Abuse, and Health Problems among American Indians and Alaska Natives: An Introduction and Overview.
SPONS AGENCY National Inst. on Drug Abuse (DHHS/PHS), Rockville, MD.
PUB DATE 2001-00-00
NOTE 34p.; In: Health Promotion and Substance Abuse Prevention among American Indian and Alaska Native Communities: Issues in Cultural Competence; see RC 022 940.
CONTRACT DA03371; DA07074
PUB TYPE Information Analyses (070)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Alaska Natives; *Alcoholism; American Indian Culture; *American Indians; At Risk Persons; Cultural Awareness; *Cultural Relevance; Demography; *Drug Abuse; Family Influence; Health Promotion; Mental Health; Peer Influence; *Prevention; Research Needs; Rural Urban Differences

ABSTRACT

This chapter reviews the literature on substance abuse and prevention efforts in Native communities. The first section describes demographic characteristics of America's indigenous people, including tribal and government definitions, interaction and validation styles, and rural-urban differences. It concludes by warning that use of broad ethnic glosses to describe any ethnic group in a research venture is poor science, and that research involving American Indians must consider the cultural variations and numerous subgroups that have distinct lifeways. The second section presents an overview of the substance use and misuse field, noting that the research on prevention is very limited. Topics covered include setting, rates and patterns of substance use, etiology and correlates of use, prevention, social skills, peers, family, school-based programs, policy, community-wide efforts, community readiness, and cultural sensitivity. Conclusions drawn include: the family is central in American Indian culture and must be involved in prevention approaches; peer influence is significant, but to a lesser degree than among non-Natives; cultural identification is not directly related to substance abuse prevention, although it may be critical in treatment; many factors affecting youth in general also impact drug use among American Indian youth; much more is known about risk than about resiliency factors for American Indian youth; and evidence of the effectiveness of school-based programs is very limited. Seven recommendations are given for the advancement of prevention strategies, themes, and research among American Indians and Alaska Natives. (Contains 72 references.) (TD)

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Prevention of Alcoholism, Drug Abuse, and Health Problems Among American Indians and Alaska Natives: An Introduction and Overview*

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I grew up with it. Everyone drank where I grew up. Everyone did. You know, kids, and the adults, and, I guess growing up that was just the way to go. There wasn't any other way. It was like you can't wait to be 21 so I can go into bars legally even though I was already in them. That was just a way of life. When we sobered up, it's still like you kind of don't fit in. It's really difficult, humiliating almost. It's almost easier to go along with the flow than to sober up.

—Anonymous American Indian informant (1995)

* This chapter was supported in part by funds provided by the National Institute on Drug Abuse (Grant Numbers DA03371 and DA07074).

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These compelling and profoundly moving words reflect the thoughts and sentiments of countless American Indians and Alaska Natives. Indeed, alcohol misuse is considered by most of America's indigenous population to be their most serious and significant health problem, a problem that affects almost every facet of life. Discussions about mental and physical health, deviance, familial problems, and community structure and function among American Indians must include, in some form or another, the influences of alcohol use and misuse. Yet it is extremely bold to assume that if the widespread use and misuse of alcohol was significantly reduced in American Indian communities that the prevalence of health and psychosocial problems would be eliminated; historical events have led to many structural problems that create numerous stressors in these communities. It is reasonable to conclude, though, that culturally resonant alcohol and drug use prevention strategies, if effective, would contribute to the reduction of illness, disease, deviance, and community disruption. Further, any discussion of alcohol problems in American Indian communities, grave as they are, must recognize that there are many American Indian people for whom alcohol poses little or no personal problems. Stereotyping of all American Indian people should clearly be avoided.

This monograph presents an inquiry into the prevention of alcohol and drug use in American Indian and Alaska Native communities. Our inquiry into the broad-based topic of prevention as a tool for health promotion and maintenance is restricted to substance use and misuse in large part because it is the area in which most of the research and development has occurred, due to its high incidence and prevalence among American Indians and Alaska Natives. To place our inquiry in perspective, this introductory section will provide an overview of substance use and misuse among American Indians and Alaska Natives and as a consequence serve as background for the other chapters contained in this monograph. To set the inquiry in motion, the first section provides important information on the demographic characteristics of America's indigenous people. The second moves to an overview of the substance use and misuse field.

Demographic Characteristics of American Indians and Alaska Natives

The terms *American Indian* and *Alaska Native* are "ethnic glosses" (Trimble, 1991, 1995). They refer to the aboriginal populations of North America and are terms imbued with political and sociocultural considerations. In this chapter, *American Indian* and *Indian* are typically used for the sake of brevity and are not meant to demean the distinct heterogeneity that exists among the many native tribes and villages and those who prefer to identify with these entities rather than with the broad glosses. The terms race and racial should be avoided where possible because they do not have relevance for American Indians and Alaska Natives. These concepts are "academic anachronisms" and have little scientific and practical value, in part because of their elusive, unbounded nature (see Yee, Fairchild, Weizmann, & Wyatt, 1993).

The term *American Indian* is an imposed, invented ethnic category originally foisted on the Arawak, a now-extinct Caribbean-basin tribe. The category continues to be used to the extent that almost all indigenous native peoples of the Western Hemisphere are referred to as Indians. Many pejorative, historical, and stereotypical images are incorporated in the meaning when it is used by outgroup members, but contemporary American Indians have also found some value in self-identification with this broad gloss. Speaking to this point, Trosper (1981) cogently argues that "American Indians have transformed themselves from a diverse people with little common identity into an ethnic group" and that they "have done so by mobilizing, with respect to a charter, the shared history of broken treaties" (p. 257). By forging a common ethnic category, America's indigenous population has created a social and political force that has far greater strength and influence than do individual tribal governments; the emergence of the pan-Indian category has created a conventional label with which one can identify (see Hartzberg, 1971).

Tribal-Specific Definitions

Tribal groups had names for themselves and, indeed, linguistic-specific names for other tribal groups. Within their own languages, the names of tribes such as Lakota, Cheyenne, Navajo (Diné), and Hopi mean "human beings" or "the people." Within tribes, bands such as "those with burned thighs" or "those who plant near the water" and moieties such as "Eagle" or "Raven" were given specific names that refer to some idiosyncratic or spiritual characteristic. In addition, tribes such as the Lakota referred to other tribes according to stereotyped physical features and characteristics: the Cheyenne were referred to as *Sihiyena* (people with a shrill voice), the Winnebago as *Hotanke* (loud-voice people), and the Navajo as *Sna-hde-hde-ha* (those with striped blankets). Such distinctions were typically ignored by American colonialists, historians, and novelists, leaving the world with the erroneous impression that American Indians were a distinctive but singular lot.

Government Attempts at a Definition

The Federal Government, through the Bureau of Indian Affairs (BIA), found it necessary to provide a legal definition of an American Indian, the only ethnic group in the United States afforded this distinction. The definition has undergone numerous revisions in the past 100 years or so, but currently the BIA defines an American Indian as a person whose American Indian blood quantum is at least one-fourth, and/or who is a registered or enrolled member of one of the 557 federally recognized tribes. The hard-and-fast criteria of BIA eliminated many people of American Indian background who affiliated in one form or another with one of some 60 federally nonrecognized tribes, ones that in many cases never signed formal treaties with the Government or that were part of scattered, small groups in the Northwest and the Southwest (see Snipp, 1989, 1996).

Some recognized, or "treaty," tribes do not agree with the BIA criteria and have developed their own specifications. Some have lowered the blood quantum criterion to one-eighth and

even one-twenty-eighth and a few have increased it to one-half. One tribe in Oklahoma in the late 1960s opened its rolls to anyone who could prove ancestral ties; the specific blood quantum was not viewed as an important criterion. About 7 percent of the tribes require that one have more than one-fourth blood quantum and about 32 percent have no set blood quantum criteria. Whatever the criteria, individuals must be able to establish their claim by providing documentation showing that one or more of their relatives or ancestors are on some version of a tribe's roll or census (Thornton, 1996).

The United States Census Bureau and the Department of Education (DOE) each developed their own criteria. The Census Bureau allows each citizen to declare his or her ethnic origin on the basis of the group with which he or she most identifies—in a word, the criterion is self-enumerative. After conducting an extensive survey among American Indian people throughout the United States, DOE staff generated some 70 distinct definitions of "American Indian." After a careful review of the results, DOE decided on a definition that closely resembles BIA criteria but provides more latitude for tribal-specific criteria, regardless of Federal status (U.S. Department of Education, 1982).

Government definitions are developed largely to determine who is eligible for services provided by treaty arrangements and congressionally mandated programs. The definitions do not include the extent to which an individual follows tribal custom and tradition or the degree to which he or she professes an ethnic identification.

Interaction and Validation Styles

Among most American Indians, merely being federally recognized and fitting the definitional criteria of the BIA and DOE are not sufficient. For many, it is vitally important to glean a sense of the way someone lives and subscribes to traditional and readily identifiable lifestyle patterns. As a consequence, when two strangers meet and it is apparent that both possess distinctive physical characteristics—dark, straight hair; dark brown eyes; brown skin; high cheekbones; broad nasal struc-

ture; and other distinguishing features—they seek to elicit information from each other to substantiate degree of ethnic affiliation. Using a nesting procedure, one will ask questions—"Where are you from?" "What tribe do you belong to?" "Who are you related to?"—in an effort to generate some commonly shared background. If one or the other doesn't quite fit the physical stereotype, the conversation may well turn to identifying which parent or grandparent was not American Indian and what the person's blood quantum might be. This is usually a delicate subject, so it is often handled rather carefully. If all of the information appears authentic and genuine, the conversation may lapse into one in which each shares stories about presumed common life experiences. Often the conversation takes on a form of "homeland centrism," in which the daily, contemporary lifestyle of the individual's origins is emphasized over tribal customs and traditions. Hence, American Indians from reservations are likely to discuss socializing influences more indicative of contemporary lifeways back home than to give attention to classic tribal customs. In a very subtle way the conversation is designed to provide evidence not only that the participants are American Indians by definition, but also that they have the experiences to back that up—experiences that demonstrate the authenticity and strength of the identification with one's ethnic origins.

Demographic Patterns

The Census Bureau currently uses a self-identification procedure to establish American Indian identity. Their definition is a departure from those developed by tribes, States, and the BIA, as no one is necessarily required to document their claim. The Census Bureau data therefore are at odds with the data maintained by the BIA and data monitored by State agencies. In 1990, the Census Bureau declared that 1,959,000 citizens were American Indians or Alaska Natives. In 1960, the Census Bureau noted that 552,000 reported they were American Indian. Thus, between 1960 and 1990 the American Indian population had grown by about 255 percent. The rapid 30-year population

increase is somewhat incredible—such population increases are almost unheard of in the field of demography. This suggests that many more citizens chose to identify with their American Indian heritage in 1990 than in 1960.

The Census Bureau's use of a self-identification criterion indeed had some effect on growth as individuals likely declared an ancestral identification without having legal ties to a tribe. Some of these individuals are those who claim multiple tribal backgrounds, yet their blood quantum for any one of them is insufficient for them to become officially registered or enrolled. For example, such individuals may have a combined American Indian blood quantum of one-half but no one tribal quantum is acceptable by each of the tribes represented in their ancestral background; they may have all of the facial features demonstrative of American Indians (that is, they look "Indian") but are not qualified to be recognized by either State- or federally recognized tribes.

Many Americans of American Indian mixed ethnic ancestry choose to identify as American Indian or Alaska Native because it creates a new identity for them that brings with it pride along with the desire to learn tribal customs, traditions, and language. Additionally, there are some people who, regardless of their degree of blood quantum, are obligated by family traditions to continue their identities as American Indian or Alaska Native. Typically, they are descended through matrilineal or patrilineal lines that are part of a highly complex clan or moiety system. To sever the ties by refusing to identify or ignoring their ancestry often brings about banishment from the clan and hence the tribe, often casting a shadow of foreboding on the entire extended family.

In 1990, slightly over half of the American Indian population resided in urban areas. The demographer Matthew Snipp maintains that "roughly half of the all urban American Indians can be found in as few as 16 cities, including Tulsa, Oklahoma City, Los Angeles-Long Beach, Phoenix, Seattle-Tacoma, Riverside-San Bernardino, New York City, and Minneapolis-St. Paul" (1996, p. 38). According to the sociologist Russell Thornton, urban American Indians are less likely to speak or understand their

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tribal language, participate in tribal cultural activities, report tribal affiliation, or marry American Indians than those who reside in rural communities, villages, or reservation communities. "If these trends continue," Thornton argues, "both the genetic and tribal distinctiveness of the total Native American population will be greatly lessened" (Thornton, 1996, p. 110). He adds that "urbanization is likely not only to result in increased intermarriage as more and more Native Americans come in contact with non-Native peoples, but also to diminish further the identity of Native Americans as distinctive tribal peoples tied to specific geographical areas" (p. 111).

In identifying American Indian and Alaska Native samples for behavioral and social science research, researchers often rely on the generic labels to describe and differentiate their respondent groups. In so doing they assume that their respondents share a common, modal understanding of their tribal lifeways and thoughtways; it is as though the researcher believes that all American Indians and Alaska Natives share commonly held, culturally unique mannerisms, styles, and states. In fact, researchers who solely rely on an ethnic gloss to describe American Indians and Alaska Natives actually ignore the richness of cultural variations within these groups and the numerous subgroups that are characterized by distinct lifeways and thoughtways (Trimble, 1991).

Use of broad ethnic glosses to describe any ethnic group in a research venture is poor science. Apart from the fact that glosses are gross misrepresentations, their use violates certain tenets concerning external validity and indeed fosters stereotypes. Heath (1978) argues that "categories of people such as those compared under the rubric of 'ethnic groups' are often not really meaningful units in any sociocultural sense" (p. 60). He goes on to add, "it is...little wonder that epidemiological and other data collected under such rubrics (i.e., ethnic minorities and other nationalistic groups) are virtually meaningless" (p. 60).

At an individual level one may rely on labels to describe their ethnic affiliation and subsequently their identity. Use of the label, though, is a small part of the identity process, as

one is likely to expand the labeling to include other subjective identifiers such as natal background, acculturative status, ego-involvement, and attitudes toward own and other groups; behavioral preferences such as language usage, friendship affiliations, music and food preferences, and participation in cultural and religious activities may also be included (Trimble, 1991). Hence, any research involving American Indians and Alaska Natives must take into consideration these factors and those discussed earlier to account for the depth of one's identity.

Overview of Substance Abuse Prevention Among American Indians and Alaska Natives

In 1982, the American Indian anthropologist Spero Manson edited the first known book devoted exclusively to the subject of prevention among American Indians and Alaska Natives. The book's contents covered five sections that included research, training, services, evaluation, and recommendations. This seminal work set an important and significant tone for a field that at that time had received little or no attention. Manson (1982) pointed out in his opening chapter that "relatively little prevention research has been conducted in the area of American Indian mental health. Much of that which exists represents a very narrow focus" (p. 11). Considerable prevention research has occurred since his work was published. Yet the published works have largely focused on the substance abuse field and in many instances deal with commentary and recommendations rather than with the research on prevention. Indeed, many important and relevant etiological and epidemiological studies exist documenting over time the prevalence and use rates of alcohol and drugs. The findings are compelling and continue to point to the need for more prevention-specific research, a point echoed more than 18 years ago by Manson and his colleagues. What follows is a detailed summary of these findings.

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Setting

The characterization of the physical, sociopolitical, and economic conditions affecting American Indian youth varies from one locality to the next, but some commonalities exist that impinge directly on the problems of drug and alcohol abuse. The lands allotted to American Indian people were typically those of least economic consequence and were usually in remote areas. In some places, this is rapidly changing with the discovery of natural resources and other forms of economic development, yet it still remains true that American Indian reservations are typically found within the poorest sectors of the country. Despite some changes for the better, poverty and its attendant ills of poor nutrition and health care; stress on all social structures (particularly the family); and inadequate housing, transportation, and other basic-support systems are still a way of life in most reservation areas. Young (1994) succinctly summarized the health conditions of American Indians as follows: "The recent epidemiological history of Native American populations appears to be characterized by several key features: decline but persistence of infectious diseases, stabilizing at a level still higher than non-Native populations; rise in chronic diseases, but not quite rampant; and the overwhelming importance of social pathologies" (pp. 52–53).

Education is a further area where inadequacy and a deficit of resources are common on reservations. Historical approaches to the education of American Indian youth were extremely harsh and the use of boarding schools has had an extremely deleterious effect on the family and on other social institutions. It is only recently that American Indian families have taken the opportunity to regain control of the educational systems and to have a central influence in the lives and development of their children.

Despite the negative picture that is generally drawn when describing American Indian youth, there have been recent, dramatic changes in the social fabric of American Indian communities that point to a much brighter future (Beauvais, 2000). Tribes have enthusiastically taken more and more responsibility for their affairs and there is a sense that the coming generations will enjoy a much better quality of life. With respect to drug and

alcohol abuse issues, American Indian communities have been in the forefront of the development of prevention interventions, although, as will be seen, the evaluation of these efforts has been sorely lacking.

Rates and Patterns of Substance Use

It has been recognized for more than 25 years that substance use and abuse has been a significant problem for large numbers of American Indian youth residing on reservations. Pinto (1973) was among the first to bring this to light and to argue for increased resources to address the problem. Subsequently, a variety of studies have demonstrated very high rates of use, although most of these have been on geographically limited populations (e.g., Cockerham, 1975; Dick, Manson, & Beals, 1993; Longclaws, Barnes, Grieve, & Dumoff, 1980). The studies of the Tri-Ethnic Center for Prevention Research at Colorado State University, however, have corroborated these local investigations and have shown higher rates of use for most drugs since 1974 for representative samples of American Indian youth across the United States (Beauvais, 1992, 1996; Beauvais, Chavez, Oetting, Deffenbacher, & Cornell , 1996; Beauvais & LaBoueff, 1985; Beauvais & Oetting, 1988; Beauvais, Oetting, Wolf, & Edwards, 1989; Beauvais & Segal, 1992; Oetting & Beauvais, 1989; Oetting, Edwards, & Beauvais, 1989; Oetting, Edwards, Goldstein, & Garcia-Mason, 1980). These higher rates have been exhibited for lifetime, annual, and 30-day prevalence as well as for an overall index of drug involvement (Beauvais, 1996; Oetting & Beauvais, 1983). In 1992, the Tri-Ethnic Center had access to a large sample of adolescents from around the United States, which included a substantial number of American Indian youth who were not living on reservations. The data showed that non-reservation American Indian youth had levels of drug use lower than American Indian youth living on reservations but higher than their non-Indian counterparts (Beauvais, 1992). The finding leads to the speculation that although reservation life has many positive aspects, there may be environmental variables (e.g., pervasive poverty and unem-

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ployment) that promote higher levels of substance use; American Indian youth not living on reservations are not as subject to these harsh conditions. Tri-Ethnic Center studies (Beauvais, 1992; Beauvais & LaBoueff, 1985) and a study by Mitchell and Beals (1997) have shown only minor variation in drug use from one reservation to another, suggesting that the causative factors are common across groups and are not a result of cultural or geographic differences. Boarding school students (Dick et al., 1993; May, 1982) and high school dropouts (Beauvais et al., 1996), however, have a higher incidence of drug use than American Indian youth in general.

Despite having higher rates of use, drug and alcohol use patterns of American Indian youth have paralleled those found for other youth, although they vary over time. Across the United States, there was a substantial increase in drug abuse through the early 1980s and then a steady annual decline through 1992. At that point, use began to rise again (Beauvais, 1996). The latter finding of recent increases has not been substantiated through epidemiological evidence for American Indian youth, but numerous anecdotal reports from local prevention and treatment people on reservations and some preliminary data indicate that a rise in substance abuse is now occurring. Data collection now taking place will help establish the recent trends for American Indian youth. The one exception to the variable pattern over the past 20 years is for those American Indian youth abusing drugs at the most extreme levels. Tri-Ethnic Center researchers have identified a "high-risk" pattern (approximately 20 percent of American Indian 7th–12th graders) that has not changed substantially since 1980.

The pattern of the findings suggests that there is a group of American Indian youth who use drugs for much the same reason as other youth (i.e., are subjected to the same secular influences that vary over time), but that there is another group (i.e., those at high risk) whose drug use is rooted in extreme dysfunction of social and personal resources. For the former, it is reasonable to conclude that prevention programs that work among youth in general and that promote prosocial and normative messages will probably be effective for American Indian

youth. The high-risk youth, on the other hand, are likely to have a host of other social dysfunctions and will require more intense approaches. In one sense, they represent a treatment population.

Etiology and Correlates of Use

While not as extensive as that for other youth, there is a body of literature that examines the etiologic and correlative factors in American Indian adolescent drug use. Some of these studies employ a more broadly based theoretical perspective while others look at single or small groups of variables in a more descriptive approach. At the macrolevel are the study of problem-prone behavior theory (Mitchell & Beals, 1997), social learning theory (Winfree, Griffiths, & Sellers, 1989), and peer cluster theory (Oetting & Beauvais, 1987). The more limited studies have examined discrete sets of variables such as emotional distress, self-esteem, anger and aggression, socialization, knowledge, attitudes, and demographic factors (Austin, Oetting, & Beauvais, 1993). The majority of these investigations have found that there is a great deal of correspondence between the etiologic factors in substance use for both American Indian and non-Indian youth. One of the more general findings across all studies where it is included as a variable is that peer influence appears to mediate nearly all other psychosocial variables in the prediction of substance use (Oetting & Beauvais, 1987). While this conclusion regarding general similarity across ethnic groups is important, a number of studies have demonstrated that there may be relative differences among cultural groups in the influence of peers. For example, in a Tri-Ethnic Center study, Swaim, Oetting, Jumper-Thurman, Beauvais, and Edwards (1993) found that although peers were significant in predicting drug use among American Indian youth, they were considerably less so than for other youth and that family influence regarding drug use was stronger. This same analysis indicated that school had a smaller influence on decisions to use drugs for American Indian youth than for other youth.

There are important implications here for designing prevention programs for American Indian youth in that the family,

rather than the school, should be the main target for interventions. Another difference often found between American Indian and non-Indian youth is the influence of religion on levels of drug use (Austin et al., 1993); religious involvement appears to be a protective factor for non-American Indian youth but has little effect for American Indian youth. This may well be more of a measurement problem; the meaning of religiosity differs greatly between the two groups and scales used to measure this dimension in the general population may not be effective with American Indian groups.

One variable that has attracted considerable attention in the search for etiologic factors is that of cultural or ethnic identification. The prevailing belief is that American Indian youth who have higher levels of identification with their culture will demonstrate lower drug and alcohol use. Despite this strong belief, the research data on this linkage have been extremely meager, not only for American Indian youth but also for all other minority populations (Bates, Beauvais, & Trimble, 1997; Beauvais, 1998; Oetting & Beauvais, 1990–91; Trimble, 1991, 1995, in press). Research to date on this issue has been aimed at finding a direct effect for cultural or ethnic identification, whereas the actual path may be indirect, operating through a number of other psychological and social variables. Given the strong investment among prevention and treatment professionals, examination of the relationship between cultural identification and substance abuse remains a fruitful and necessary area of inquiry.

Regardless of the causative implications of culture on drug use, there is a clear consensus among drug abuse researchers and practitioners that prevention programs must be designed to be culturally appropriate (Beauvais & LaBoueff, 1985; Fleming, 1992; May, 1995; Petrovsky, Van Stelle, & De Jong, 1998; Trimble, 1992, 1995; Trimble, Padilla, & Bell-Bolek, 1987). Programs must include content and activities that are congruent with and promote the values, beliefs, and practices of the aboriginal people of the Americas. The primary reasons for this are respect for the culture of American Indian and Alaska Native communities and to ensure that any program will be acceptable within the communities. Even though a particular approach may have been

shown to be effective in reducing drug use among adolescents in other locations, if it is not accepted as being culturally relevant it will have no chance of success.

In examining the full range of research conducted on American Indian youth, it can be concluded that the majority of it has been focused on problem behaviors with very little addressing healthy or resilient behaviors. At least two authors have noted that unless there is further attention paid to the factors involved in positive adolescent development among American Indian youth, our knowledge of prevention of negative behaviors will be seriously limited (Beauvais, 2000; Mitchell & Beals, 1997).

Prevention

Over the past decade there have been numerous efforts to catalogue and summarize the nature of drug prevention activities among American Indian youth (Hayne, 1993, 1994; Office of Substance Abuse Prevention, 1990; Owan, Palmer & Quintana, 1987). May and Moran (1995) and May (1995) have provided a comprehensive review of drug and alcohol prevention programs among American Indian populations using the public health model of primary, secondary, and tertiary prevention. While it is clear that there is a tremendous amount of activity directed toward preventing drug abuse in American Indian communities, there are only a handful of studies that have applied any rigorous scientific attention to determining effectiveness. May and Moran (1995) concluded, "Few systematic outcome evaluations of either approach (primary and secondary prevention) have been completed in Indian communities. Thus, based on the work in the field to date, we believe that although these approaches have much promise, indications of success should be characterized as preliminary" (p. 297).

Social Skills

Among those few programs that have received some scientific scrutiny are those described by Schinke and Gilchrist and their colleagues (Gilchrist, Schinke, Trimble, & Cvetkovich, 1987;

Schinke, Botvin, et al., 1988; Schinke, Gilchrist, Schilling, & Walker, 1986; Schinke, Orlandi, Botvin, & Gilchrist, 1988; Schinke, Schilling, & Gilchrist, 1986; Trimble, 1992). In the first of these studies (Gilchrist et al., 1987), a skills enhancement program was developed to accommodate local tribal lifeways and administered to a group of young American Indians in the Pacific Northwest. One hundred and two youth (mean age 11.34; 49% female) were screened and half of them were randomly assigned to a program that included health education information about drugs and a series of exercises designed to identify values and to improve decision-making skills regarding future use of drugs and alcohol. Compared with the control group, the experimental youth exhibited lower rates of alcohol, marijuana, and inhalant use (but not tobacco use) at both posttest and 6-month followup. Also noted at both testing periods were reductions in self-perception as a drug user, an increase in knowledge about drugs, and an improved ability to refuse offers to use drugs. In a similar study, which enhanced problem solving by the teaching and modeling of social competence skills, a 6-month followup revealed reductions in abuse of alcohol, marijuana, inhalants, stimulants, and barbiturates (Schinke, Botvin, et al., 1988). Once again, random assignment to experimental and control conditions was used. The latter study is significant in that a social competence component was derived from the theoretical notion that youth who can be trained in bicultural competence (i.e., can function comfortably in both American Indian and non-American Indian society) should display better overall adjustment and lower substance use. This idea is discussed extensively by LaFromboise and Rowe (1983) and LaFromboise, Coleman, and Gerton (1993) and is also consistent with the theoretical framework and empirical findings of Oetting and Beauvais (1990–91) and Oetting (1993).

The idea of the efficacy of bicultural competence training should receive a great deal more attention in future research, given that this is one area in cross-cultural substance abuse research that is solidly based in theory and that has shown some promising empirical results. It is a general model that, if proven efficacious, will have application to other minority populations.

Unfortunately, not much has been done to follow up on the promising work of Schinke or Gilchrist in more than a decade.

Peers

In a pilot study of alcohol abuse with a group of American Indian youth, Carpenter, Lyons, and Miller (1985) found that the incorporation of peer counselors into a prevention program led to significant decreases in alcohol consumption at the end of the intervention and at 4-, 9-, and 12-month followups. This was a very small (n = 30), uncontrolled study and the results should be viewed with caution. In another small pilot study, Duryea and Matzek (1990) found some promising results using peer pressure resistance among American Indian elementary school students. While encouraging, the existing studies on peers and drug use among American Indian youth are extremely limited. Given the centrality of peers in the etiology and maintenance of drug-using behavior in general and specifically within American Indian populations, prevention programs incorporating peer dynamics need considerably more investigation.

Family

There is nearly universal agreement that the family is of paramount importance among and within all American Indian groups (Fleming, 1992). While the centrality of the family in the development of children and adolescents is recognized by most cultures, the traditional kinship and extended family structure of American Indian communities add importance to this socialization source. With respect to influence on drug and alcohol abuse specifically, Swaim et al. (1993) have demonstrated that American Indian families may take precedence over peers as the most proximal determinant of abuse or non-abuse. This is contrary to the usual finding of the predominance of peer influence among non-American Indian adolescents (Oetting & Beauvais, 1986).

Given the importance of the family, it is surprising that there is scant literature addressing prevention interventions that feature the family. Hayne (1993, 1994) presented a review of more

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than 60 prevention programs on American Indian reservations and in urban American Indian centers. A review of the goals and content of these programs reveals that less than 10 percent focus on the family as one of the more important intervention targets. Most of the programs list activities such as parent training skills, recreational activities to increase contact with the family, drug education for family members, and similar elements, but only a few include the family as a central focus of the interventions. An exception to this is a recently described project by Van Stelle, Allen, and Moberg (1998). The project is built on a 24-week intervention that includes a family weekend retreat, a family drug abuse curriculum, home visits, family support groups, an elders resource council, and cultural activities that bring youth, parents, and elders together. The project enjoyed wide acceptance in the community and many of the existing service agencies participated. Unfortunately, no data were provided on behavioral outcomes.

School-Based Programs

By far the majority of drug prevention programs across the United States are implemented in the school setting, and the situation in American Indian communities is not much different (Owan et al., 1987). A further similarity is the lack of consistent assessment of effectiveness. A few programs have demonstrated specific, short-term gains (Bernstein & Woodall, 1987; Murphy & DeBlassie, 1984), but most lack any evidence that they can be generalized or that the gains are sustained over time. Particularly overlooked is the need for continued booster sessions that seems to be the *sine qua non* of effective school-based programs (Botvin, Baker, Dusenbury, Botvin, & Tracy, 1995). Given the popularity of school-based interventions, it is imperative that more effort be placed in assessing their impact and in determining the dimensions that are required for effectiveness.

Policy

Policy is an area that has received virtually no attention in substance abuse prevention among American Indian youth. In an

exhaustive overview of policy concerning alcohol reduction among American Indian populations, May (1992) found few empirical studies, outside of those examining the effects of alcohol prohibition, which addressed policy topics. Yet, May was able to list no less than 107 potential avenues for alcohol control, based on findings in the general literature and an analysis of policy options available in American Indian communities. It is notable that even as comprehensive as this list is, it did not include issues of school policies regarding drug and alcohol abuse among adolescents. This is a ripe and important topic for research development and program opportunities. Policy options clearly overlap with legal approaches, but again, outside of the studies showing that prohibition has little effect on alcohol consumption in American Indian communities, there are no studies showing how the police and courts can effectively address adolescent drug use prevention in American Indian communities.

Community-Wide Efforts

The past decade has witnessed a growing interest in community-wide prevention efforts and that interest has also been evident in American Indian communities. The impetus for this movement in part comes from disenchantment with the effectiveness of highly targeted and limited prevention interventions. Gorman (1996), for example, reviewed the outcomes of the majority of the school-based prevention programs and concluded that most of them have only a minimal and transitory effect on substance abuse. Given the complexity of and the many interacting social, psychological, and biological elements leading to substance abuse patterns, it is not surprising that a 6-week school curriculum intervention, for instance, will not substantially change drug use patterns among adolescents.

Recognizing the manifold nature of adolescent substance abuse, many in the substance abuse prevention field are recommending approaching the problem on multiple fronts. Certainly the emphasis on community partnerships within the Center for Substance Abuse Prevention, for example, is a reflection of this

stance. The same momentum has been building over the past several years within American Indian communities. May and Moran (1995) and May (1995) conclude from their reviews of prevention activities in American Indian communities that there is a need for a more general, multifaceted public health approach to drug abuse prevention (see also Rolf, 1995). Within the past 5 years the American Indian and Alaska Native Mental Health Research Center has undertaken a major community partnership initiative, funded by the Robert Wood Johnson Foundation, at the University of Colorado Health Sciences Center. Called the *Healthy Nations Project*, the initiative led to the identification of 13 American Indian urban and rural communities in which 5-year prevention projects are now being developed. The projects are designed to be locally initiated and locally controlled efforts that are highly responsive to the cultural beliefs and needs of each location. Each project is expected to develop a variety of networking and intervention activities that address the problem of substance abuse across the continuum from needs assessment through treatment aftercare and relapse prevention. Current descriptions of the progress in these communities reveal an impressive diversity of culturally grounded activities.

The problems involved in any scientific analysis of drug prevention efforts are only magnified when the arena of interest is expanded to encompass multiple community and individual activities and their interactions. Of particular concern is the unique nature of each community coalition and the interventions they define as being appropriate for their locale. The diversity precludes multiple applications of a standard approach that can be compared in an experimental design. A second major problem is the identification of a reasonable control community. American Indian and Alaska Native communities are heterogeneous, not only in their cultural makeup but also in structural characteristics such as size, governance patterns, cultural lifeways and thoughtways, and economic bases. The presence of the heterogeneity creates major doubts as to whether or not external validity can be assured by any design. A third issue is determining the actual level of exposure to any or all of the

coalition efforts. While there may be a plethora of activities taking place in a particular community, it is often difficult to tell which ones, and to what degree, youth may have participated in. In short, assessment of the effectiveness of community coalitions, or partnerships, usually entails fairly loose experimental designs and often, equivocal results.

All of the above problems were inherent in an effort to evaluate a community-based alcohol prevention program on a western reservation by Cheadle et al. (1995). The initial plans for randomization and identification of comparable control communities were stymied by funding considerations. Consequently the control communities were non-Indian locations in another State. Pre-, post-, and followup surveys of youth in the community did show reductions in alcohol and marijuana abuse over a 4-year period. However, similar, albeit smaller, reductions were also seen in the "control" communities and the research team was reluctant to attribute the reductions to the prevention program. Furthermore, the team was unable to document to what extent the youth had been exposed to prevention activities throughout the course of the program.

Community Readiness

It is a common observation among those working with American Indian communities that there is a seemingly endless succession of new drug prevention programs that are brought into communities, thrive while external funding is available, and then rapidly disappear with the cessation of funding. A major element of this circumstance is likely that the communities never had an initial investment in the program (Beauvais & Trimble, 1992). The need for these programs is often not widely recognized or accepted; the programs are usually designed by someone outside of the community and most likely they are not congruent with the culture of the community. Furthermore, many of the implemented programs are so ambitious that they overwhelm the existing resources within the community. For example, a school-based program that requires a considerable financial investment in teacher training and materials will not

work in a reservation school where both dollars and human capital are at the breaking point.

As a response to this mismatch between community needs, perceptions, and attitudes and the need for drug prevention interventions, an approach labeled "community readiness" has been developed that focuses on community dynamics vis-à-vis the acceptance of these interventions (see Jumper-Thurman, Plested, Edwards, Helm, & Oetting, this monograph). The underlying principle of this model is that communities are at different levels in their readiness and willingness to engage in prevention interventions. If the intervention is attempted before the community is ready, or if the intervention is too complex for the level of readiness, then implementation is likely to fail. Note that this model does not address the inherent value or quality of the intervention; an intervention may have been shown to be extremely effective in other locations but will misfire if the community is not ready to accept and implement it.

A critical aspect of the community readiness model is that it is prescriptive as well as descriptive. Descriptively it can be used to objectively measure movement within the community. Prescriptively the model can be used to foster community development. At each stage there are interventions that can be undertaken to move the community along to the next stage. For example, early on (though not at the earliest stages) data such as those from drug surveys can be gathered to further inform and motivate a community to undertake prevention. It is important, however, that these interventions be timed appropriately and conform to what the community is ready to handle. It would be futile and perhaps counterproductive, for instance, to collect drug survey data if the community was exhibiting tolerance toward drug use. Another aspect to the prescriptive nature of this model is that community members themselves provide the data and determine what steps are to be taken to increase readiness. A type of "self-study" is involved where a census of local resources is taken and decisions are made about how they can be used to move forward.

The community readiness model is both qualitative and quantitative. Substantial amounts of interview data are col-

lected in the process of specifying where a community is on the continuum. The end result, however, is a numerical rating that can be used in statistical analyses to determine whether or not a community has changed in their level of readiness as a result of a community development intervention.

Once again, community readiness does not speak to the issue of the effectiveness of any drug prevention strategy. It does, however, provide an accurate gauge for determining at what point certain interventions can be introduced. Without attention to this critical timing, no program, regardless of its demonstrated potency in similar communities, can be effective. It would appear essential that more attention be paid to the community readiness paradigm. At the same time, efforts must continue to examine the specific types of interventions that will be effective in American Indian communities.

Cultural Sensitivity

There are a number of requirements that must be recognized and attended to when the research enterprise crosses cultural boundaries. Failure to do so has led to the failure of many research efforts, which for obvious reasons do not show up in the literature. (See Manson, 1989 for an exception.) Trimble (1977), Rolf (1995), and Beauvais and Trimble (1992) discuss many of these requirements, including access to research populations, trust, collaboration in the design of researchable ideas and in the research process, measurements that capture concepts crossculturally, and the interpretation and dissemination of results from a cultural perspective. Petrovsky et al. (1998) recently described a community-wide drug prevention program in an American Indian community that not only demonstrated positive outcomes (substance use rates were lower than those of a comparison community) but also conformed to cross-cultural research requirements. Each of the four components of the intervention was designed through extensive discussions with community members; this took an extended period of time but was necessary to establish the legitimacy and relevance of the research project. In addition, community members

were included as staff. Problems and interim project outcomes were discussed with local people in an effort to adjust the goals to not only be scientifically rigorous but also to meet the needs of the local community. Results of the study included both quantitative and qualitative comparisons; the latter were most useful to the community in terms of determining the impact of the intervention.

Monograph Contents

The contents of this monograph represent the longstanding and dedicated commitment of the authors to reducing and eliminating the harsh consequences of alcohol and drug abuse in American Indian and Alaska Native communities. The chapters are thin slices of the realities of daily life in American Indian and Alaska Native communities and thus represent a very small portion of what can be said about the entire topic. Nonetheless, each chapter represents at a minimum what one must know to work effectively in American Indian and Alaska Native communities in the prevention field.

The core theme of each chapter reflects on the importance of family and community in designing and implementing prevention strategies in American Indian and Alaska Native settings. James Moran provides the historical context of prevention efforts in American Indian communities and outlines some of the current barriers to program development. He then reviews the primary, secondary, and tertiary prevention work over the past few years and from that review draws a number of principles that should be adhered to in future programming efforts. Grace Powless Sage provides a different context in describing American Indian approaches to healing that differ from those typically seen in drug intervention programs. She then argues for a synthesis of the holistic approaches from the American Indian worldview with "traditional" drug prevention activities. Gerald and Justin Mohatt and Kelly Hazel provide yet a different context. The vast expanses of Alaska present numerous challenges to prevention within Alaska Native villages; however,

they describe numerous initiatives at the State, regional, and local levels that are responsive to the demographic and cultural needs of Alaska Natives. Pamela Jumper-Thurman and her colleagues expand on the community readiness theme and describe its application to a variety of prevention programs for American Indians. The process of assessing community readiness is fully described. Jeannette Johnson and her team address community perceptions of and effectiveness of the National Association of Native American Children of Alcoholics. Rich ethnographic data are included to illustrate their conclusions. Finally, Fred Beauvais addresses the issue of the effectiveness of school-based prevention programs in American Indian communities. His article ends with a strong recommendation that American Indian families, rather than schools, should be the primary focus of prevention in American Indian communities.

It is our sincere hope that the material in this monograph will serve to strengthen everyone's resolve to reduce the incidence and prevalence of alcohol and drug abuse and of life-threatening illnesses occurring among many of the indigenous peoples of the Americas. We sincerely hope that American Indians and non-American Indians will benefit constructively from the information and seek ways to follow through on the recommendations.

Summary and Future Directions

Much can be written about the present and future status of prevention programs designed for use in American Indian and Alaska Native communities. Certainly, there are few published articles about research findings on American Indian prevention programs and thus there is a desperate need for more research on the topic; the etiologic findings support such a recommendation. The material summarized and presented in this introductory chapter sets a tone that demands attention. From the prevention and etiologic literature that does exist, the following conclusions can be drawn with respect to effectiveness of prevention and intervention activities among American Indian youth:

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1. The centrality of the family in American Indian culture makes it imperative that it is involved in prevention approaches.
2. Peers exert a significant effect on decisions about drug use, although to a lesser degree than among non-American Indians.
3. As currently defined and measured, cultural identification is not directly related to substance abuse prevention although it may be critical in treatment.
4. Many of the factors affecting youth in general also impact drug use among American Indian youth.
5. Much more is known about risk than resiliency factors for American Indian youth.
6. The evidence for the effectiveness of school-based programs is very limited.

As a consequence of Manson's 1982 seminal work, in 1984 Trimble outlined a series of recommendations directed towards the advancement of prevention strategies, themes, and research among American Indians and Alaska Natives. According to these recommendations, researchers should consider these questions:

1. What forms of drug and alcohol use are thought to be preventable? By what indigenous and tribally specific means?
2. What are the models of human and transcultural competence "in terms of individuals, families, and communities" that account for the immense heterogeneity among American Indians and Alaska Natives? How can these models drive prevention and intervention strategies?
3. What are the characteristics of natural support systems? What are the traditional ways of changing and strengthening those systems to advance the prevention of substance use and abuse, of illness, and of individual and social deviance?
4. What culturally appropriate information about the causes and consequences of substance use and abuse, illness, and deviance is available for circulation and use in American Indian and Alaska Native communities? What procedures

are available to assist American Indians and Alaska Natives in turning cognitively based information into behavioral skills to assist them in coping with situations involving alcohol and drugs?

5. What are the psychosocial characteristics associated with the lifespan predictors of substance use and misuse? What are the age-specific gender differences and characteristics?
6. What treatment modalities (indigenous and traditional) are available to effectively deal with substance use and misuse? What expectancy variables define treatment, the therapeutic relationship, and aftercare? From the American Indian's point of view? From the intervenor's point of view?
7. Under what conditions and for what reasons are practices and techniques of traditional healers and shamans appropriate for dealing with American Indian and Alaska Native substance use and misuse? What are the ethical issues associated with changing the shamanic traditions to accommodate conventional forms of health and wellness interventions, including psychiatric and conventional psychological approaches?

Although these recommendations are 16 years old, they still hold relevance and promise for setting an agenda for future work.

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